

TECHNICAL REPORT



Safety of laser products – Part 5: Manufacturer's checklist for IEC 60825-1



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Safety of laser products – Part 5: Manufacturer's checklist for IEC 60825-1

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SAFETY OF LASER PRODUCTS –**Part 5: Manufacturer's checklist for IEC 60825-1**

FOREWORD

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The main task of IEC technical committees is to prepare International Standards. However, a technical committee may propose the publication of a Technical Report when it has collected data of a different kind from that which is normally published as an International Standard, for example "state of the art".

IEC 60825-5, which is a Technical Report, has been prepared by IEC Technical Committee 76: Optical radiation safety and laser equipment.

This third edition cancels and replaces the second edition of IEC TR 60825-5 published in 2003. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) a new class, Class 1C, was introduced;
- b) the measurement condition 2 ("eye loupe" condition) was removed;
- c) for compliance with non-beam hazards (8.14.1) according to relevant product safety standards, a reference was made to corresponding product reports.

The text of this International Standard is based on the following documents:

Draft TR	Report on voting
76/585/DTR	76/608/RVDTR

Full information on the voting for the approval of this technical report can be found in the report on voting indicated in the above table.

This document is to be used in conjunction with IEC 60825-1:2014.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 60825 series, published under the general title *Safety of laser products*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

IEC 60825 consists of the following parts, under the general title *Safety of laser products*:

- Part 1: Equipment classification and requirements
- Part 2: Safety of optical fibre communication systems (OFCS)
- Part 3: Guidance for laser displays and shows
- Part 4: Laser guards
- Part 5: Manufacturer's checklist for IEC 60825-1
- Part 8: Guidelines for the safe use of laser beams on humans
- Part 12: Safety of free space optical communication systems used for transmission of information
- Part 13: Measurements for classification of laser products
- Part 14: A user's guide
- Part 17: Safety aspects for use of passive optical components and optical cables in high power optical fibre communication systems

SAFETY OF LASER PRODUCTS –

Part 5: Manufacturer's checklist for IEC 60825-1

1 Scope

This part of IEC 60825, which is a Technical Report, is applicable to laser products as described in IEC 60825-1:2014.

The checklist is intended for use by manufacturers of laser products and their agents to establish that each new or modified design complies with the requirements of IEC 60825-1:2014. The checklist is used in conjunction with IEC 60825-1, as relevant clauses and subclauses in IEC 60825-1 are referred to in the text.

The layout of the checklist is intended only as a guide. Manufacturers and examiners are encouraged to produce their own document, omitting questions and clauses that are not relevant to the types of product under examination, but noting in the appropriate positions the numbers of such clauses stating, for example: "Subclause 9.11.1: Question omitted – not applicable".

The manufacturer is responsible for ensuring that the examiner is a person competent in the inspection and classification of laser products.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60825-1:2014, *Safety of laser products – Part 1: Equipment classification and requirements*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60825-1 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

Throughout this document, the abbreviation N.A. means "not applicable".

4 Identification

4.1 Details of the examiner

Identification of the person responsible for examining and classifying the product under inspection: